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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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K&L Gates LLP				
P.O. BOX 1135				
CHICAGO, IL 60690				
EXAMINER				
HOM, SHUCK C				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/016,845

**Applicant(s)**

KLOPER, DAVID

**Examiner**

SHICK C. HOM

**Art Unit**

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 7-11, 14-18, 21-25, 28-32, 35-39 and 42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 7-11, 14-18, 21-25, 28-32, and 35 is/are allowed.
- 6) ☒ Claim(s) 36-39 is/are rejected.
- 7) ☒ Claim(s) 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-848)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments, see Remarks, filed 12/23/08, with respect to the rejections of claims 1-4, 7-11, 14-18, 21-25, 28-32, 35-39, and 42 under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in view of Kelly et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dezelan in view of McCrady et al.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dezelan (5,999,127) in view of Mccrady et al. (6,453,168).

Regarding claims 36 and 38-39:

Dezelan discloses a satellite communications system comprising: a terminal configured to perform ranging to determine a target transmission rate among a plurality of transmission rates (col. 2 line 65 to col. 3 line 22 recite hardware and processes for determinate and monitoring range); and a hub configured to receive the ranging message and to perform ranging measurements corresponding to the message, the hub outputting a ranging response message that includes ranging parameters, the ranging response being transmitted to the terminal, wherein the terminal adapts the target transmission rate based upon the ranging response, wherein the hub instructs the terminal to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, and the satellite supports bi-directional communications as in claim 36; wherein the terminal iteratively transmits the ranging message to determine a maximal transmission rate for the target transmission rate as in claim 38; and wherein the transmission

rate is periodically modified in response to a change in the characteristics of the channel as in claim 39 (col. 12 lines 4-16 recite the processor using ranging response of the satellites, along with transmitter and receiver design characteristics, computes the transmission rate and whereby the parameters are continually monitored and the transmission rates adjusted incrementally in a somewhat cyclic fashion as the communication satellites pass overhead clearly reads on the hub as in claims 36 and 38-39).

Regarding claim 37:

Dezelan discloses wherein the terminal includes memory configured to store the ranging parameters, the parameters including at least one of power information and timing information associated with the transmission of the ranging message (col. 2 lines 7-41 recite the parameters of the particular link application in being terms of range, satellite-to-satellite geometry dynamics, transmitter power, data rate, weather, and other operational factors and col. 2 lines 42-62 recite the use of storage).

Dezelan discloses all the subject matter of the claimed invention with the exception of whereby performing ranging include transmitting a ranging message over the satellite as in claim 36.

McCraday et al. from the same or similar fields of endeavor teach that it is known to provide whereby performing ranging include transmitting a ranging message over the satellite (the abstract recite the master radio transmitting an outbound ranging messages to the reference radios which respond by transmitting reply ranging messages and upon reception of the reply ranging message, the master radio determines the range to the reference radio from the signal propagation time calculated by subtracting the far-end turn around time from the round-trip elapsed time).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide whereby performing ranging include transmitting a ranging message over the satellite as taught by McCraday et al. in the satellite communications network of Dezelan.

The means and step of performing ranging include transmitting a ranging message over the satellite can be implemented by including the step of transmitting a ranging message over the satellite of McCraday et al. to the terminal for performing ranging of Dezelan. The motivation for including the step of transmitting a ranging message over the satellite as taught by McCraday et al. in the terminal for performing ranging of Dezelan being that it provides more efficiency of design for

the system since the system uses a known method of performing ranging.

***Allowable Subject Matter***

4. Claims 1-4, 7-11, 14-18, 21-25, 28-32, and 35 allowed.
5. Claim 42 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.  
Lee et al. disclose a method for controlling data transmission rate in interactive satellite communication system.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHICK C. HOM whose telephone number is (571)272-3173. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pham Chi can be reached on 571-272-3179. The fax phone number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chi H Pham/  
Supervisory Patent  
Examiner, Art Unit 2416

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